

## AMENDMENTS TO THE CLAIMS

*A listing of the claims presented in this patent application appears below. This listing replaces all prior versions and listing of claims in this patent application.*

**Claim 1 (currently amended):** A thermoelectric transducing material comprising a layered cobaltite based substance ~~represented by the chemical formula  $A_x\text{CoO}_2$ , wherein  $[[A]]$~~  the layered cobaltite based substance is structured such that at least one  $A'\text{CoO}_2$  layer and at least one  $A''\text{CoO}_2$  layer are stacked in a layer thickness direction, and  $A'$  and  $A''$  are each consists of ~~an element or element group selected from alkali metal elements and or alkaline earth group elements, and  $[[is]]$  compositionally modulated in a thickness-wise direction of layers in a structure of the layered cobaltite based substance~~  $A'$  and  $A''$  are different elements.

**Claim 2 (currently amended):** The thermoelectric transducing material according to claim 1, wherein a composition ratio of  $A'$  and a composition ratio of  $A''$  are each value of  $x$  ~~representing a composition ratio of  $A$  is not less than 0.2 and not more than 1.~~

**Claim 3 (currently amended):** The thermoelectric transducing material according to claim 2, wherein the composition ratio of  $A'$  and the composition ratio of  $A''$  are each value of  $x$  ~~representing a composition ratio of  $A$  is not less than 0.3 and not more than 0.7.~~

**Claim 4 (currently amended):** The thermoelectric transducing material according to claim 3, wherein the composition ratio of  $A'$  and the composition ratio of  $A''$  are each value of  $x$  ~~representing a composition ratio of  $A$  is not less than 0.4 and not more than 0.6.~~

**Claim 5 (canceled).**

**Claim 6 (original):** The thermoelectric transducing material according to claim [[5]] 1, wherein the layered cobaltite based substance is structured such that a plurality of  $A'\text{CoO}_2$  layers and a plurality of  $A''\text{CoO}_2$  layers are alternatively stacked in the layer thickness layering of  $A_x\text{CoO}_2$  layers corresponding to the respective kinds of elements or element groups is repeated in a layering direction.

**Claims 7 and 8 (canceled).**

**Claim 9 (currently amended):** The thermoelectric transducing material according to claim [[8]] 1, wherein [[A]]  $A'$  is an alkali metal element or ~~element group consisting of an alkali metal element, while~~ and  $A''$  is an alkaline earth element or ~~element group consisting of an alkali earth group element.~~

**Claim 10 (currently amended):** The thermoelectric transducing material according to claim 9, wherein a thermoelectric transduction ~~thermoelectric trasduction~~ power factor  $P$  is  $1.5 \text{ mW/K}^2\text{m}$  or more.

**Claim 11 (currently amended):** The thermoelectric transducing material according to claim [[8]] 1, wherein [[A]]  $A'$  is an element or element group consisting of an alkali metal element and a thickness of the  $A'_x\text{CoO}_2$   $A'\text{CoO}_2$  layer is not less than 1 nm and not more than 3 nm.

**Claim 12 (currently amended):** The thermoelectric transducing material according to claim [[8]] 1, wherein  $A''$  is an element or element group consisting of an alkali earth group element and a thickness of the  $A''_x\text{CoO}_2$   $A''\text{CoO}_2$  layer is not less than 2 nm and not more than 8 nm.

**Claim 13 (currently amended):** The thermoelectric transducing material according to claim [[8]] 1, wherein a thickness of the  $A'_xCoO_2$   $A'CoO_2$  layer is not less than 1 nm and not more than 3 nm, while a thickness of the  $A''_xCoO_2$   $A''CoO_2$  layer is not less than 2 nm and not more than 8 nm.

**Claim 14 (original):** The thermoelectric transducing material according to claim 13, wherein the thermoelectric transduction power factor P is 2 mW/K<sup>2</sup>m or more.

**Claim 15 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is Na and A" is Sr.

**Claim 16 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is Na and A" is K.

**Claim 17 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is Na and A" is Ca.

**Claim 18 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is Na and A" is Ba.

**Claim 19 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is K and A" is Ca.

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**Claim 20 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is K and A" is Sr.

**Claim 21 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is K and A" is Ba.

**Claim 22 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is Ca and A" is Sr.

**Claim 23 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is Ca and A" is Ba.

**Claim 24 (currently amended):** The thermoelectric transducing material according to claim [[9]] 1, wherein [[A]] A' is Sr and A" is Ba.

**Claims 25-27 (canceled).**